

memorandum

DATE: DEC 09 1997

SUBJECT: DOE-AL Response to the May 14, 1997 Explosion on Hanford's Plutonium Reclamation Facility

TO: Kim Delman, DOE-AL/OSHD

Reference: Telephone conversation between B. Kim, DOE-GJO, and K. Delman, DOE-AL/OSHD, December 8, 1997, same subject.

Additional information was requested from your office regarding the subject (referenced above), and the following information is provided for your use.

- a. What approval process is used by DOE for assessing known vulnerabilities (chemical and radiological) at the facility...?

GJO utilizes a formal review of the contractor's Health and Safety Plan (HASP) and provides concurrence signatures by the DOE-GJO project manager and a health and safety specialist for all HASPs. These HASPs include hazard assessment and control for each identified task and associated hazard(s) per 29 OSHA 1910.120, which is more rigorous than any other health and safety plan and procedure. Further, the DOE-GJO Safety Assessment, dated June 1996, has been reviewed by the DOE safety and health specialist and approved by the GJO manager. Since that time, DOE-GJO further reduced chemical and radiological hazards.

- b. Assess the technical competence of the staff to recognize the full range of hazards presented by the materials in their facilities...

GJO has one safety and health specialist on board, and he has a Certified Safety Professional (CSP) designation. The technical competence is reviewed by the manager annually, and any needs for further training are identified and utilized through the Individual Development Plan (IDP).

If you have any questions, please contact Bo Kim at (970) 248-7620.



Michael K. Tucker

Team Leader, Technical Support

memorandum

DATE: NOV 25 1997

SUBJECT: DOE/AL Response to the May 14, 1997 Explosion at Hanford's Plutonium Reclamation Facility

TO: AL/OSHD

Attached are actions taken in response to the subject memo for your information. DOE-GJO also conducted H&S Walk-through (Nov. 12 at GJO Site and Monticello during Nov. 6-7) on both FOS and TAR contractors and verified the contractors' responses and actions associated with the subject.

Based on the H&S Walk-throughs and a recent review, DOE-GJO has adequate procedures and these documentation are adequately addressed the corrective action identified by the Secretary of Energy memo, dated Aug. 4, 1997, subject: DOE Response to the May 14, 1997 Explosion at Hanford's Plutonium Reclamation Facility.

If you have any questions, please contact Bo Kim at (970) 248-7620.



Mike Tucker
Team Leader, Technical Support

Attachment (2)

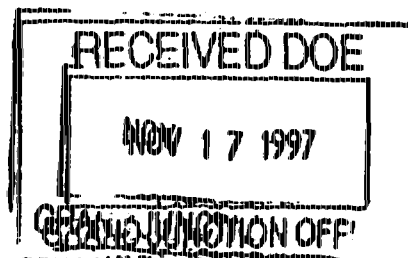
cc:
D. Christenson, OMD



2597 B 3/4 Road • Grand Junction, CO 81503
(970) 248-6000 • Fax (970) 248-6040

B. H. Kim
Safety & Health Specialist
U. S. Department of Energy
P. O. Box 2597
Grand Junction, CO 81502

November 17, 1997
In Reply Refer to: LSH/GJ-026/1197



SUBJECT: Contract No. DE-AC13-96GJ87460; "DOE/AL Response to the May 14, 1997 Explosion at Hanford's Plutonium Reclamation Facility." (D3190)

Dear Mr. Kim:

In response to the May 14, 1997, explosion at Hanford's Plutonium Reclamation Facility, the Secretary of the Department of Energy (DOE) directed that several broad initiatives should be implemented at the DOE field offices. The response to these initiatives is a joint effort by the Safety and Health/Radiation Protection and Environmental Compliance groups. Each initiative is described below along with *WASTREN-Grand Junction's (GJ)* action to address them.

1. DOE site contractors must scrutinize their use or storage of any chemicals that have the potential for explosion, fire, or significant toxic release, and must promptly dispose of unneeded chemicals according to safety requirements and environmental regulations. DOE field offices should develop an approval process to assure the disposal of safe and environmentally compliant storage and handling of such chemicals retained.

WASTREN-GJ Safety and Health/Radiation Protection and Environmental Compliance groups provide oversight for the purchase, storage, and use of all chemicals used at the facility. Chemicals are not permitted on the facility unless they have been received as part of the Chemical Tracking System; Material Safety Data Sheets are available for the site personnel for all chemicals on the site. *WASTREN-GJ* provides a tiered approach to self-assessment for the use and storage of chemicals by conducting independent audits, weekly walk-arounds, and informal management observations. The Safety and Health/Radiation Protection organization conducts daily and weekly facility walkdowns to identify potential violations of regulations. In addition, annual and semiannual building inspections are conducted in accordance with the Schedule for Regular H&S Oversight Assessment. Environmental Compliance conducts weekly RCRA and SAA inspections for compliance with applicable regulations. There are three areas considered as "risk areas." These areas are Building 20 (Laboratory Services), Building 42 (Interim Status Hazardous Waste Storage Area), and Building 61A (Hazardous Waste Storage Area). After notification of the Hanford Explosion, these three areas were heavily scrutinized and carefully inspected to review storage and use of the chemicals specific to each area. No significant findings were noted. All other buildings were inspected with no significant findings. A Hazard Communication Program Quality Assurance Audit, in compliance with 29 CFR 1910.1200, was conducted in June 1997 with

three findings noted. The findings, although considered as non-serious, were entered into the commitment tracking system for corrective action. The three findings have been addressed and closed. An Independent RCRA audit was conducted in August 1997. The audit addressed chemical compatibility and storage, ignitability requirements per 40 CFR 265.17, and reactivity of incompatible waste. No significant deficiencies were noted in the audit. Since WASTREN-GJ assumed the Facility Operations Contract (FOS) at the DOE Grand Junction Office (GJO) Facility, the Environmental Compliance organization has made two waste shipments. The shipments contained chemicals that were no longer needed in the existing processes, chemicals that had expired, and waste chemicals.

2. DOE field offices must reassess known vulnerabilities (chemical and radiological) at facilities that have been shutdown, are in standby, are being deactivated, or have otherwise changed their conventional mode of operation in the last several years, and report status to their Program Secretarial Officers and the Assistant Secretary for Environment, Safety and Health within 120 days. Facility operators must evaluate their facilities and operations for new vulnerabilities on a continuing basis.

The buildings at the GJO site have all been assessed for their known vulnerabilities within their current status. No buildings have been shutdown or placed in a standby status. Those buildings scheduled for deactivation (buildings 26, 29, 31A, 33, and 35) have had all chemicals redistributed or placed in appropriate storage in other buildings for proper reuse or disposal. No existing conditions would recreate hazards representative of those that created the Hanford Explosion. The routine building inspections provide a continuing evaluation for vulnerabilities and none have been noted.

3. DOE and contractor field organizations with operational responsibilities must assess the technical competence of their staffs to recognize the full range of hazards presented by the materials in their facilities, act on results, and implement training programs where needed.

WASTREN-GJ maintains a competent staff of personnel who fully recognize the hazards present on the facility and can implement appropriate corrective actions, if necessary. All personnel are required to attend Hazard Communication Training, Environmental Compliance Awareness Training, and Safety and Health/Radiation Protection Awareness Training (updated and required annually). In addition, specific personnel are trained in accordance with 40 CFR 265.16, "Personnel Training," which incorporates hazardous waste management procedures and effective response to emergencies (including, fires and explosions). A monthly Joint Safety Policy Meeting is conducted between DOE and the FOS and TAR Contractors to review the effectiveness of the safety efforts, resolve safety and health problems relating to current operations and provide a forum for planning safe future construction and other activities. Regularly scheduled supervisor safety meetings and weekly "toolbox" or "on-the-job" safety meetings for the employees are required. These trainings provide technical competence for facility personnel to recognize noncompliant activities and conditions and provide immediate corrective actions to prevent conditions that might create a condition that existed before the Hanford Explosion.

4. DOE field offices must assess their site Lessons Learned and Occurrence Reporting programs to assure that 1) outgoing information is well characterized and properly summarized, and 2) incoming information is thoroughly evaluated, properly disseminated, appropriately implemented and tracked through formal management systems.

The Quality Assurance (QA) group serves as the coordinator for the dissemination of lessons learned for the GJO, as described in the *Quality Assurance Standards* QAI 3.3, "Dissemination of Lessons Learned." Incoming information on lessons learned from the DOE community is distributed to *WASTREN-GJ* and *MACTEC-ERS* managers. Each manager reviews the lessons for applicability within their areas of responsibility and distributes the information within the organization with a routing slip. Managers and investigation leaders identify internal lessons learned through investigations, self-assessment, and post-activity evaluations. Lessons learned reports are developed and distributed throughout the DOE-GJO facility. When the lessons learned may be beneficial to others, the Occurrence Reporting and Processing System (ORPS) is used to distribute the information. All Occurrence Reports originated at the GJO facility are formulated as a cooperative effort between the responsible organization, Safety and Health/Radiation Protection Group, and the DOE Health and Safety Specialist.

This letter serves as the final report and meets the requirement for the report for DOE Tracking Number D3190.


If you have any questions concerning the response to the commitment tracking request, please call Gary Thigpin at extension 7662.

Sincerely,



Linda S. Hendrickson
Compliance Management Manager

bas/LSH

cc: J. T. Bennett, *WASTREN-GJ*
T. K. Campbell, *WASTREN-GJ*
J. W. Gardner, *WASTREN-GJ*
L. S. Hendrickson, *WASTREN-GJ*
R. L. Morris, *WASTREN-GJ*
M. K. Orn, *WASTREN-GJ*
J. F. Sink, DOE-GJO
G. P. Thigpin, *WASTREN-GJ* 
C. A. File
To File

NOV 21 1997

CONTRACT NO.: DE-AC13-96GJ87335
TASK ORDER NO.: MAC98-11-03
CONTROL NO.: 3100-T98-0200

November 20, 1997

Safety and Health Specialist
Department of Energy
Grand Junction Office
2597 B 3/4 Road
Grand Junction, Colorado 81503
ATTN: Mr. Bo H. Kim

Subject: Contract No. DE-AC13-96GJ87335—DOE/AL Response to the May 14, 1997
Explosion at Hanford's Plutonium Reclamation Facility - D3191

- Reference:
1. Memorandum, Federico Pena to Program Secretarial Officers/Field Element Managers, dated August 4, 1997, DOE Response to the May 14, 1997 Explosion at Hanford's Plutonium Reclamation Facility
 2. Memorandum, Gene E. Runkle to W. Steven Goodrum, et al, dated August 14, 1997, same subject
 3. Memorandum, Larry D. Kirkman to W. S. Goodrum, et al, dated September 22, 1997, same subject

Dear Mr. Kim:

In reference 1, Secretary Federico Pena requested that each site contractor implement four broad initiatives and report on the progress at the end of the year. Reference 2 requested that the report addressing the identified initiatives be forwarded to the Occupational Safety and Health Division (OSHD) by December 12, 1997. Reference 3 changed that due date to November 26, 1997.

Each initiative is described below and MACTEC-ERS's action to address it.

1. DOE site contractors must scrutinize their use or storage of any chemicals that have the potential for explosion, fire, or significant toxic release, and must promptly dispose of unneeded chemicals in accordance with safety requirements and environmental regulations. DOE field offices should develop an approval process to assure the disposal or safe and environmentally compliant storage and handling of such chemicals that are retained.

Action: MACTEC-ERS and its subcontractors have few chemicals that have any potential for explosion, fire, or significant toxic release. The largest quantities of chemicals are associated with the Monticello Remedial Action Project Waste Water Treatment Plant. The hazards and

Mr. Bo H. Kim

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Control No.: 3100-T98-0280

operating procedures associated with the WWTP are addressed in the *Monticello Projects Health and Safety Plan* (MAC-MRAP 1.3.4) and the *Monticello Remedial Action Project Wastewater Treatment Plant Operations and Maintenance Manual, Volumes 1, 2, and 3*.

2. DOE field offices must reassess known vulnerabilities (chemical and radiological) at facilities that have been shutdown, are in standby, are being deactivated, or have otherwise changed their conventional mode of operation in the last several years, and report status to their Program Secretarial Officers and the Assistant Secretary for Environment, Safety and Health within 120 days. Facility operators must evaluate their facilities and operations for new vulnerabilities on a continuing basis.

Action: MACTEC-ERS has no facilities which have been shutdown, are in standby, are being deactivated, or have otherwise changed their conventional mode of operation in the last several years. The Monticello Remedial Action Project is an ongoing remediation program with full-time safety support for identifying vulnerabilities on a continuing basis.

3. DOE and contractor field organizations with operational responsibilities must assess the technical competence of their staffs to recognize the full range of hazards presented by the materials in their facilities, act on results, and implement training programs where needed.

Action: MACTEC-ERS and its subcontractors maintain competent staffs of personnel who fully recognize the hazards present in the work they perform. Worker qualifications and training for the Monticello Remedial Action Project are strictly maintained in accordance with 29 CFR 1910.120.

4. DOE field offices must assess their site Lessons Learned and Occurrence Reporting programs to assure that 1) outgoing information is well characterized and properly summarized, and 2) incoming information is thoroughly evaluated, properly disseminated, appropriately implemented, and tracked through formal management systems.

Action: The Lessons Learned program is described in Manual GJO 1, *Grand Junction Office Quality Assurance Manual*, QAI 3.3, *Dissemination of Lessons Learned*. Incoming information on lessons learned is distributed to managers, who review the lessons for applicability within their areas of responsibility, and distribute the information within their organization as needed. The Occurrence Reporting program is described in Chapter 4 of Manual GJO 2, *Grand Junction Office Health and Safety Standards*. It requires that management determine and document the significance, nature, and extent of events or conditions, as well as the causes, corrective actions, and lessons learned. It further requires the use of information from contractor occurrences and occurrences from other sites to prevent future occurrences.

Mr. Bo H. Kim

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Control No.: 3100-T98-0280

No additional action on these items are expected. If you have any questions, please call me at extension 6468 or Don White at extension 6432.

Sincerely,

A handwritten signature in black ink, appearing to read "M. Hurshman", with a long, sweeping horizontal stroke at the end.

Michael R. Hurshman
Health and Safety Manager

/dew

cc: M. C. Butherus

D. L. Quamme

G. P. Thigpin

D. E. White

Contract File (C. Spor)

HS 2.1.1.4

memorandum

DATE: DEC 15 1997
REPLY TO:
ATTN OF: LAAMFO:3KZ-030
SUBJECT: Progress Report on Implementation of Recent Emergency Management Direction
from DOE Headquarters

TO: Tom Gutierrez, OMD, AL

This is to provide you with a response to your memorandum, dated September 22, 1997, requesting an end of year progress report regarding the May 14, 1997 explosion at Hanford's Plutonium Reclamation Facility.

Los Alamos Area Office personnel have completed the progress report jointly with Los Alamos National Laboratory subject matter experts, and the report is attached.

If you have any questions or comments, please contact Ken Zamora of my staff at (505) 665-6351.


G. Thomas Todd
Area Manager

Attachment

cc w/o attachment:
R. Zamora, AAMFO, LAAO
R. Valdez, LAAMFO, LAAO
D. Barber, Sciencetech, LAAO
J. Schinkel, ESH-5, LANL, MS-K486
V. Simpson, OSHD, AL

DEC 17 1997